



SEQUENCE LISTING

#6

<110> Schlegel, Robert
Endege, Wilson
Monahan, John

<120> COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION,
ASSESSMENT, PREVENTION, AND THERAPY OF HUMAN
PROSTATE CANCER

<130> MRI-007A

<140> US 09/768,827

<141> 2001-01-24

<150> US 60/178,525

<151> 2000-01-24

<150> US 60/183,245

<151> 2000-02-17

<150> US 60/190,139

<151> 2000-03-16

<150> US 60/208,126

<151> 2000-05-31

<150> US 60/219,705

<151> 2000-07-18

<150> US 60/255,160

<151> 2000-12-13

<160> 101

<170> FastSEQ for Windows Version 4.0

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<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(395)

<223> n = A,T,C or G

<400> 1

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cagacagaag aaatagcaag tgccgagaag ctggcatcag aaaaacagag gggagatttg 120
tgtggctgca gccgagggag accaggaaga tctgcatggt gggaaggacc tgatgataca 180
gaggtgagaa ataagaaaag ctgctgactt taccatctga ggccacacat ctgctgaaat 240
ggagataatt aacatcacta gaaacagcaa gatgacaata taatgtctaa gtagtgacat 300
gtttttgcac atttccagcc cttttaaatn tccacacaca caggaagcac aaaaggaagc 360
acagagatcc tgggagaaat gcccggcccg ctcta 395
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<210> 2

<211> 237

<212> DNA

<213> Homo sapiens

<220>
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<223> n = A,T,C or G

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atgttctaca ttatcgtgga aatgttgaca aggtctcnag caagactgg atctncantg 120
gnttttaaaat acaatnntcc atttcggaaa ttganggaaa aagatctttt ncaanctgga 180
agagtcttct tgtaaataag aatcacnggg ctacacctgc tgacgacctt ggggtttt 237

<210> 3
<211> 463
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(463)
<223> n = A,T,C or G

<400> 3
ttagggcgaa ttggagctcc ccgcggtggc ggccgaggta ctatatggac accaacaatgg 60
agcanaaaaat gagggcagca gtgtccaatc tcattccagg tgagaagttg cacagtgtcc 120
aatagggtgca tacatctcct tagtaagtag ttgtgattaa caatgaaata gaaatgaaaa 180
atatattttt ttatttatgt gtatttatatt ttccaagcag ctaataagtt ggtaggacat 240
aatattttaat tcgttgggga cctaattatt tataaattga atggtttagat atttcttttg 300
gcctaagcca ccatgaaaaa atcactgagg cgctaaggga aacatgaact aagaagccct 360
tctgagttct tgttttctca actgtaagat gaanaaacct gctccacctt cctcttgcca 420
ttggtgaacg gcagtttgag atactgcgca gaatggacct tat 463

<210> 4
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G

<400> 4
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atgatgggag tggccacctg ctttcatatt ctgaagtcag agtggtccag acagaagaaa 120
tagcaagtgc cgagaagctg gcatcagaaa aacagagggg agatttgtgt ggctgcagcc 180
gaggagagacc aggaagatct gcatggtggg aaggacctga tgatacagag gtgagaaata 240
agaaaggctg ctgactttac catctgaggc cacacatctg ctgaaatgga gataattaac 300
atcactagaa acagcaagat gacaatataa tgtctaanta gtgacatgtt ttttgacat 360
ttccagcccc tttaaataac cacacacaca ggaagcacia aaggaagcac agagatccct 420
gggagaaatg cccg 434

<210> 5
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 5
ctatagggcg aattggagct ccccgcggtg gggcgcgccc gggcatggta cgcggggagg 60
tggtgttccg tgaatcagca catcaattgc agcattgtgg ctaccagggg gtcaggatgc 120
ggncggtgga gccctctggc ctttgtgtgg tagccgagga ctctgtgtca gctgaccgtt 180
ttccggnaaa ctttcgtgcg agactcacat cttggaaatt caaatactca atanctctcg 240
aattctagga atcttgagaa gaggcctgga ttaangattc anacatgggc ctnanatng 300
ntatggcatt gctggttcta ccaacgtgac ag 332

<210> 6
<211> 348
<212> DNA
<213> Homo sapiens

<400> 6
ccgggcaggt accagaactt cagcaaagga agcagacaca ggtcggagga agcctacata 60
gacccccattg ccatggagta ttacaactgg gggcggttct cgaagccccc agaagatgat 120
gatgccaaatt cctacgagaa tgtgtctcatt tgcaagcaga aaaccacaga gacaggtgcc 180
cagcaggagg gcataggtgg cctctgcaga ggggacctca gcctgtcact ggccctgaag 240
actggcccca cttctggtct ctgtccccct gcctcccccg aagaagatga ggaatctgag 300
gattatcaga actcagcatc catccatcag tggcacgagt ccaggaag 348

<210> 7
<211> 188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(188)
<223> n = A,T,C or G

<400> 7
ttagggcgaa ttggagctcc ccgcggtggc ggccgaggta cttttttttt tttttttttt 60
tttttgacct tgggtatctt ctgcagggtca agccatcctg accactctga gaacttaccc 120
agggtgactc anctgtcact ccagggtcact cataagccca acgggtagct ccaccctggtg 180
acagctgg 188

<210> 8
<211> 603
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(603)
<223> n = A,T,C or G

<400> 8
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ggaacgtgaa ttttaatgag ggggcanacc gaggaggtgg tggctgcccc gagatcaggg 120
ccaggctgtg ctanatggcn cctggaaggg gggtcaccca agtctccctg ctatcatttc 180
aggaggccga cccaagtctc cctgctgtca tttcaggagg ccgaattttt tcccgatccc 240
anagaagggt tcaaaggcct ggtagcant cttgtcgatg gtttcctggg tggctctggc 300
canctggtcc atggctttct gccccgcctc tgtggcctgg tccaccactt gctganctgc 360
cgctccggcc cgctnacacg gtttcctggg cgggtccctc cacctgttgc ttcaggctct 420
gcaagccctt gcttgccatg gcttcggggg atctgtggag tcntcaagan canctggagc 480
cacnttgat cctncccaaa gtggcccccg cgtaccttgg cccgtntaaa actatgtgga 540
atcccccccg cctgcangaa ttccatatca aagcttatng ataccggcg accctcgagg 600
ggg 603

<210> 9

<211> 429
<212> DNA
<213> Homo sapiens

<400> 9
ccgcggtggc ggccgaggtg cgcgggggtca ttactacagg aaaaactggt ctcttctgtg 60
gcacagagaa ccctgcttca aagcagaagt agcagttccg ggtccagct ggctaaaact 120
catcccagag gataatggca acccatgcct tagaaatcgc tgggctgttt cttggtggtg 180
ttggaatggt gggcacagtg gctgtcactg tcatgcctca gtggagagtg tcggccttca 240
ttgaaaacaa catcgtggtt tttgaaaact tctgggaagg actgtggatg aattgcgtga 300
ggcaggctaa catcaggatg cagttgcaaa atctatgatt ccctgctggc tctttctccg 360
gacctacagg cagccagagg actgatgttg cgctgcttcc gtgatgtcct tcttggtttt 420
catgatggc 429

<210> 10
<211> 338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 10
cgctgatgtt ggccangcga gagggccacg ttctcctgag tgttcagaag ggtcttacag 60
acgtccaggg gggtcgtggc ggccgcggcg agggcccgcc ccagcccgcc tgagatgatg 120
tgggactgcg ggttgtaggt ccggtggggg ttgacctgct cctgcaggaa ctcataggtg 180
atgaagtgga tggactggaa ggggatgttc atggtcagct gcgtgggtga gctccggtag 240
aaggccccc acccctnggt cctccacacc gtccggatgc aactgattgc tgaccggtgc 300
tgcnagtgtg acctgcccgg gcggccgctc tagaacta 338

<210> 11
<211> 561
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(561)
<223> n = A,T,C or G

<400> 11
gccgcggggc aggtacaaac ttagaagaaa atnggaagat agaaacaaga tagaaaatga 60
aaatattgtc aagagtttca gatagaaaat gaaaaacaag ctaagacaag tattggagaa 120
gtatagaaga tagaaaaata taaagccaaa aattggataa aatagcactg aaaaaatgag 180
gaaattattg gtaaccaatt tatttttaaaa gcccatcaat ttaatttctg gtggtgcaga 240
agttagaagg taaagcttga gaagatgagg gtgtttaccg tagaccngaa ccaattttaga 300
agaatacttg aagctagaag gggaagtgtg ttaaaaaatca catcaaaaag ctactaaaag 360
gactggtgta attttaaaaa aaactaaggc agaaggcttt tggaagaagt tagaagaatt 420
tggaaggcct taaatatagt agcttaattt gaaaaaatgt gaaggacctt tcgtaaccgg 480
aaggtnatth caagatnaaa gaagtaattt accaacctta atggtttttg cttttggggc 540
ttttgagttt aaagaattan t 561

<210> 12
<211> 367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(367)

<223> n = A,T,C or G

<400> 12

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gttatttctg cagttgtnga cttaggctta tttgtaaaga agcatgctcc attgactgcc 120
atctctagtc ttgcagtggg tggatattaac ccatagaaag caagcagttg tgtatcacat 180
acacaatggg tatgatgnta accanatcan ctgtttngtt gttcattcgt natatgtttt 240
gtgatangga tgttgggagc acagctctat tctgcctgct cagacttaag ttagaccctt 300
atcttttata ttatgtcatg aaaaaagtct cctaaaaatt gtgaaactag cctcttgatg 360
agtgatg                                     367
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<210> 13

<211> 464

<212> DNA

<213> Homo sapiens

<400> 13

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ccgcggtggc ggcccgaggt acatggccac aagaggagcc ctggccaaca gtttcaggct 60
ggccatcttg ggctggggct ccctgggctt gcagtgggga gggtcaggat tcaaattctg 120
ggtgacaatt tcagtagcac caagaccaga agacagttag gccacgctgg ggagtggggg 180
agtgtttgta tgtgggatgc atggagggag gctgcagtat gtggaggaga aagagaggct 240
gttgtgggct ggttcttaag acactcaagg ggactcaaag ggtcggctcc agccatggac 300
actatctaag gctgctcaga ggagaatgct ggaggagagg aagagggaagt gaaatggtgt 360
gagaacattc ttacccttat aaataaacta tttacacact ttaagaaaag gagagccggc 420
tctcagtcct gcgtacctgc ccggggccggc ccgctctaga acta 464
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<210> 14

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(519)

<223> n = A,T,C or G

<400> 14

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acaccttgag ccttgatgag ttccagtatg tggatatatta tgcagagcat tcagagcaaa 120
tactctctct ccgagcgctt aatccgaaca attgtgcca tccgttcctt cccacatgat 180
aatgtagagg acctcatcag agggggagca gatgtgaact gcactcatgg cactactgaag 240
cccttgcact gtgcctgtat ggtgtcagat gctgactgtg tggagtact tctggaaaaa 300
ggagccgagg tgaatgcctt ggatgggtat aaccggaaca gccctccact atgcancaga 360
gaaagatgag gcttgtgttg aggtcctatt ggagtatggt gcaaacccca atgcttttga 420
tggcaacaga gatacccccac ttcactgggt agcctttaag aacaatgctg agtgtgtgctg 480
ggctctccta gagagcgggg cctctgtcaa tgccctgga 519
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<210> 15

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(422)

<223> n = A,T,C or G

<400> 15

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ctgcctggac acacgcagat ttntgtctta ntcacacaca cagcgagaca tgctgtcccg 120
```

```
acacacacac gcatgcacag atatgctgtc cggacacaca cacgcacgca natatgcttg 180
cctggacaca cacacagata atgctgcctc aacactcaca cacgtgcaga tattgcctgg 240
acacacacat gtgcacagat atgctgtctg gacatgcaca caccgtgcag atatgctgtc 300
cggatacaca cgcacgcaca catgcagata tgctgcctgg gcacacactt tcggacacac 360
atgcacacac aggtgcagat attgctgcct ggacacacgc agactgnacg tgcttttggg 420
ag 422
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<210> 16

<211> 360

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(360)

<223> n = A,T,C or G

<400> 16

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aggagtgcag aaccctgtan cccgtgtcat catgtgtgtt ttcaagngct gcctctggtg 60
tctggaaaaa tttatcaagt tctaaaccn caatgcatac atcatgatcg ccatctnccg 120
gaagaatttn tgtgtctcag ccaaaaacgc gttcatgctn ctcatgcgaa acattgtcag 180
ggnggtcgtc ctggacaaag tcacagacct gctgntgttc tttgggaagc tgctgggtgg 240
cggaggcgtg ggggtcctgt ccttcttttt tttctccggt cgcattnccg ggctgggata 300
aagactttaa nagcccccac ctnaactatt actggctgcc ccatcatgac cctncantcc 360
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<210> 17

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(428)

<223> n = A,T,C or G

<400> 17

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cgcccgggca ggtacattct catcattagg attggttgtt gctgtccttg cacaactggg 60
taaggaaaaa tgaattattc tgtaatttct gaagaatcca aatcctgtct cttataaagt 120
cagaacagaa gggggcaaaa ggtgggtggg agcatcaaga gagaaaaaag gagaaaatta 180
tttacagaaa ataggagaca ngaggggagt tccgcaagaa aagacttcat tgctacttct 240
tcttgccggc cctcttgga ctggactttg ctttggtttt cactggtttg gccttttttg 300
gcttggtatg ctttgaccgg cttggccttg acagtcttgg gtttttttgg cnttcttggg 360
cgtggcagcc aagcttcttc ttggccttct tgaccgcggg tggctttngg ttttcttttg 420
nttggggg 428
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<210> 18

<211> 491

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(491)

<223> n = A,T,C or G

<400> 18

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ggtggcggcc gaggtacctc aaaagtgggg aaatcccat ataactgang acgaaggcag 60
ttcagaagtt cattgatttg ccctaagggt cctcaatttg caaacgtcag gccaatgatc 120
caacccaggt tatgtttggc agtgaaggac cagttgagtc atagctgcaa gtaaccaccc 180
tgcagtggtc cctatcttgg ccgttagctt acattgacat ttaacactca aatttactca 240
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```
gtaacaccag ctatcatgtt ttccactaaa actccacagc attctggcaa cttttctatt 300
ttagagcaat aaagtaaatt gttagcatcc ctttgacata taaatatttc tacaaatagt 360
aattctctag ccattcattt ggagtattta aaactcaaca ttcatagcac attttatggg 420
gacaaagaac ttatgttcag aacacaaaaa ataagtcgta cctgcccggg cgggcggtct 480
tngaactagt g                                     491
```

<210> 19

<211> 114

<212> DNA

<213> Homo sapiens

<400> 19

```
acaaaaacca atctacctga tgaaaactcc gttcccttct cgccagaaac ataaaatgcg 60
atggagctac ggccaccgct gccgagacaa aatggcgccg acccccgcgct acct      114
```

<210> 20

<211> 405

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(405)

<223> n = A,T,C or G

<400> 20

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cgggggtggg taaagacttt aagagccccc acctcaacta ttactggctg cccatcatga 120
cctccatcct gggggcctat gtcatcgcca gcggcttttt tcagcggttt tcggcatgtg 180
tgtggacacg cccttcctct gcttcctgga agacctggag cggaacaacg gctccctgga 240
ccggccctac tacatgtcca agagccttct aaagattctg ggcaagaaga acgaggcgcc 300
cccggacaac aagaagagga aggaagtgac agctccggcc ctgatccagg actgcacccc 360
acccccaccg tccagccatt caaccttact tcgccttaca gggtc      405
```

<210> 21

<211> 530

<212> DNA

<213> Homo sapiens

<400> 21

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ctcactatag ggcgaattgg gagctccccg cgggtggcggc ccgcccgggc aggtactata 60
tggacaccaa catggagcag aaaatgaggg cagcagtgtc caatctcatt ccagggtgaga 120
agttgcacag tgtccaatag gtgcatacat ctcccttagta agtagttgtg attaacaatg 180
aaatagaaat gaaaaatata tttttttatt tatgtgtatt atatttttca agcagctaata 240
aagtttgtag gacataatat ttaattcggt gggggacctaa ttatttataa attgaatggg 300
tagatatattc ttttggccta agccaccatg aaaaaatcac tgaggcgcta agggaaacat 360
gaactaagaa gcccttctga gtctctgttt tctcaactgt aagatgaaga aacctactcc 420
accttcctct tgcgattgtt gaacggcagt tgagatactg cgcagaatgg gaccttattg 480
atggcctacc caacatccat tctctactcc ctctactctg atggcacccg      530
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<210> 22

<211> 195

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(195)

<223> n = A,T,C or G

<400> 22

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ccgcggtggc ggccgaggta cgcgggggtt tcagggtcgt aggacgccgt tgggcaccac 60
gctcggagaa ggacaggaca atggcgccct taggggtccc gtcgcacact ttctgaggac 120
ttctgcggga gttgcgctac ctgagcgcg gacaccggccg ctctagaact aagtggatcc 180
ccccggcttg canga 195
```

<210> 23
<211> 198
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(198)
<223> n = A,T,C or G

```
<400> 23
ctccccgcgg tggcggccga ggtacgcggg gctctatata agtgggcagn ggccgngact 60
gcgcgcagac actgaccttc agcgccctngg ctccagcgcc atggcgccct ccaggaagtt 120
cttcggttgg ggaaactgga agatgaacgg acggaagcag antctggggg agctcatcgg 180
cactctnaac gcggccaa 198
```

<210> 24
<211> 620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

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<400> 24
ccaccgcggt ggcgcccgag gtacagtggc acctgggaaa aggcacctgg aaggtttcca 60
tgtggcccag cccagcatgg aagcagggtg ggaactctgc tgtgtcgcca gcgctcactc 120
tactcgagtg gctttttgaa agccctacca tgtctgtgtc aggcctgtgc tgcttcacata 180
cctacagctg cctaggaaa ggcggccacg ctccctgtcc acacactccc tgtccacaca 240
ctccctgtcc acacactccc tgtccacaa tgcagccggg ccctctgcct atgggcacccc 300
aatccaagca gctgctccac ctttgtttgg catggtgatt tgtgtttttt ctcttgggcg 360
ttatgtgtgt gggcttgga cgaagtgtct gtatgcactt aggaccttct tgatagctcc 420
ctgcactttg gaacacggag caaatgaaaa aagggtcggg gcttgccctc caccttgga 480
ttggaagaag cccacattgg agangtgaag gaccccatgg tggctctagt gggaaaatac 540
gttagcctca anctnaggan ggatgaggcc aaccccaana gggagacctt aattgatagg 600
ggatcangct aaaaaaatgg 620
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<210> 25
<211> 349
<212> DNA
<213> Homo sapiens

```
<400> 25
aggtactcgc gctgttcttc tgttatcatc cagggttcgt cggggtaact gctgttatcc 60
tgtagtcccc tctccactga aaaagaccgg ataagggaag cctgatgccg aaggggcttg 120
gttcctgggc cccctgatga ggatccctcg ggctggacaa ggggctgcct agcttcataa 180
ggtgctggat gcatctgttc tgcgttgctc cgcagtttgc tgtagccatg gctcaagggc 240
accctctggt aatgaggcgg ggaagaagga ggggagggca ggggtgacat cgtgggagac 300
tgtgtttcct gctgtttatc ctcatcgctc attcttttga aggaatttt 349
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<210> 26
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(434)
<223> n = A,T,C or G

<400> 26
ccgcggtggc ggccgcccgg gcaggtacgc ggggattgtg gcagctggag gtctctgcat 60
cgcttatccg tttattagcc ggaccaagat tgcacagcta aagtctggca gagactccac 120
ggtatgactg tcctcactgg gcctgtccac agtgcgagcg actcctgagg ggaacagcgc 180
cggagttcag gagtccaagc acaaagcggc cttttacatt ccaacctgtt gcctgccagc 240
cctttctgga ttactgatag aaaatcatgc aaaacctccc aacctttcta aggacaagac 300
tactgtggat tcaagtgtt taatgactat ttatgcgttg actgtgagaa tagggagcag 360
ngccatggga cttttctagg tgtagagaaa gaagaaactg caatggaaaa atttgtatga 420
ttccattta tttc 434

<210> 27
<211> 480
<212> DNA
<213> Homo sapiens

<400> 27
ccgcggtggc ggccgaggtta cagtgggttaa tttgtcacia ctgactgagg catcacaaca 60
acagcagcag tcaccactac aagaacaagc acagacttta cagcagcaga tttcatcaaa 120
tatttttcca tcaccaaata gtaacaacat gcctggaatt caaggagcca catcttcgcc 180
ttcaaccaca ggctactttt atttcacaac acagcaggag gcacaatgaa ccaactgcag 240
aattctcctg gctcatctca gcagacatca ggaatgttct tatttggtcat tcaaaataac 300
tgtagtcagc ttttaacctc tggaccagct acattgcctg atcagttgat ggccataagt 360
cagccaggcc aaccacaaaa cgagggccag ccacctgtga caacacttct ttctcagcaa 420
atgccagaga attctccact ggcatcctct ataaacacca accagaacat cgaaaagatt 480

<210> 28
<211> 472
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(472)
<223> n = A,T,C or G

<400> 28
ctacttaggg cgaattggag ctccccgcgg tggcggcgcg ccgggcaggt actctgggtca 60
tcttcgttcg tttggtcgtg caaggtgtta actattttca cttcccatat cacaaggtta 120
gtccacagga ggagctggtg gatcttgtcc attatgagga ctggttggct ttccaggtag 180
gctggatcct nttagattag gaggtgtcga gtaagaacag gatcaatgca ataaccatcc 240
aggctaccaaa gatnattgta aactgatgc cnttatnacc agaggggtccc ggtaattnct 300
gaanacactc tgtgtctgtg cagtatgatt gggactgccg tancanattg ntcagtcttc 360
tcantgcatn gtttcatgag agcaaaacac attnacaggg atcaaattcc accttcttgc 420
ccattattac ccagcttgga tttttacttg gacctntttt taaaatcccn cc 472

<210> 29
<211> 449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(449)
<223> n = A,T,C or G

<400> 29
cccgcggtgg cggccgaggt actgcgtggc cgtccgctgt tgtgtggcct gggccgcaaa 60
ccgggccacg tggttgacaa tgggggagaa attggttagga ccgtagaagc ggatgtgggg 120
caggcaagct gagtacgcct gggcaatacc atccacacct gagcagaagg ggttgggtggg 180
gttgaagttg atggcaaaact catgggagac cttccagtct gggggtaact gggccccgaa 240
tcccagagct ggaaacatct tatcactgtc gtagtcctga atgatctgcc caacagccca 300
gatggccgac agatattcgt tgggtgcccat aggggtgata tantgcaaag aggaaggggtc 360
gaggggattc ccgttggagg ctgtaaagtc tattccaacg gtgaacatga gctggcagcc 420
tcccaggacg tagtcaagga aggagtagt 449

<210> 30
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 30
ccgcggtggc ggccgaggtc tgaactgcgg ggtctctatc gcactgctag gggttctgct 60
gctgggtgcg gcgcgcctgc cgcgcggggc agaagctttt gagattgctc tgccacgaga 120
aagcaacatt acagttctca taaagctggg gaccccgact ctgctggcaa aaccctgtta 180
catcgtcttt tctaaaagac atataacat gttgtccatc aagtctggag aaagaatagt 240
ctttaccttt agctgccaga gtccctgagaa tcactttgtc atanagatcc agaaaaatat 300
tgactgtatg tcaggcccat gtcccttttg ggaggttcag cttcagccct cgacatcggt 360
gttgccctacc ctcaacagaa ctttcatctg ggatgtcaaa 400

<210> 31
<211> 122
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(122)
<223> n = A,T,C or G

<400> 31
tgatcttcag ctgctcctga actttggcac tgtaaggggt ctctgtatcg tatggtgggtg 60
acaaagcttt taaaataacc tntcctccag tgcattgaaa aggactggag tatttatnaa 122
gt

<210> 32
<211> 575
<212> DNA
<213> Homo sapiens

<400> 32
acttgtgagc ctggactggc tccccggcc tcctacatga accccttccc ggtgctccat 60
ctcatcgagg acttgaggct ggccttggag atgctggagc ttcctcagga gagagcagcc 120
ctcctgagcc agatccctgg cccaacagct gcctacataa aggaatgggt tgaagagagc 180
ttgtcccagg taagccacca cagtgtctgt agtaatgaaa cctaccagga acgcttggca 240
cgtctagaag gggataagga gtccctcata ttgcagggtga gtgtcctcac agaccaagta 300
gaagcccagg gagaaaagat tcgagacctg gaagtgtgtc tggaaggaca ccaggtgaaa 360
ctcaatgctg ctgaagagat gcttcaacag gagctgctaa gccgcacatc tcttgagacc 420
cagaagctcg atctgatgac tgaagtgtct gagctgaagc tcaagctggt tggcatggag 480
aaggagcaga gagagcagga ggagaagcag agaaaagcag aggagttact gcaagagctc 540
aggccccctca aaatcaaagt ggaagagttt ggaaa 575

<210> 33
<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(422)
<223> n = A,T,C or G

<400> 33
gggagtggag cgggtgaacac gtcaggggtg gggggcgcag gtcaagcttt caccagtttt 60
taattctttg atggggtaaa tttgagcaat tttctcgact tgtcgacatt cgttattaac 120
tgancaggaa tcagganagg aaccgcgtcc tctccacaca gccagcana gaggctacga 180
ctagatttgc atctttacgt cctgcgcgga ggctgctaca cacatgcana agtcatgctg 240
gtggcctgga cattgaagg agagaagtgg atttgggaga catttaggag gcaccgaaag 300
cgaaggaagc tcctgctcct cctaaagccg aagccaaagc aaaggcttta aaggccaaga 360
aggcagtgtt gaaaggtgtc cgcagccaca cgcaaaaaag aggatccgca tgctactcac 420
ct 422

<210> 34
<211> 702
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(702)
<223> n = A,T,C or G

<400> 34
accgcggggg cgcccgnggn ttengcctgg aggagctcag ggtggccggc attcacaaga 60
aggtggcccg gaccatcggc atttctgtgg atccgaggag gcggaacaag tccacggagt 120
ccctgcagac caacgtgcag cggctgaagg agtaccacaa agggacccaa attcagcggg 180
ctgtgcctac aaacttcatt aataactgct tgcagattgg cagctatctg gtcacttgac 240
atatccaatg ttgctatttt ggtctggaga aagtctctcc tttcttcatc taccttaatt 300
tcatgtccat ttttaaataa ttcaaacatt ttggggatgt caccggccaat ggaatttcga 360
gaaagctttg gatatttttt attcagtttc ttcttaatc gattaagtgc aggattatt 420
tctggaacag ctacgtaaaa gtctgcaaca atttcatcat cccaaatcct ctgtatcaga 480
ctaagtgcct cctgcaaatt cagctccatt ttcttccgct attttgacct ctgatgcatt 540
ctctgtaaat acagcaactt tattgatttc cgaagccaat gggatggca aactaanaac 600
actggtaaat ggcttcacgt ttttcttntt ttccagtgc atatncagtg tcaaaatcaa 660
anaaaacact ttgctttgga ctagttaaag ccaanaattt ga 702

<210> 35
<211> 597
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(597)
<223> n = A,T,C or G

<400> 35
acatcttcca ggacaaggta aactctgaca tgcactaggt atgtgcagat cccggcccct 60
gccacccagc ctcatgcaag tcatccccga catgaccttc acgaccgcaa tgcaaggagg 120
ggaagaaagt cacagcactg atgaggacag ctgcagagggt ggacgtgtgt ggacacagga 180
agtttgggcc ccctccctgc cccagctttc ctaggccaga attgtgtttg gcagtaattg 240
tctgttttaa aaaataaaaa ggagaggaag cgttcaccgc cacaaatcat aaatggaca 300

```
tgactgtgga gtcttacagt tcaggggttct ttcattcacg tcccttctctg tctcgggtctg 360
cgggtctttac cacatcaata ggacttttta tgcgtccggg ttaatttttc actccagtgc 420
gtcctgtttgc agggaccgga gctgatggga gctgcttctc cccatgcctc actgggtcca 480
gatcanggct tcagggacag atgatgagtc tcaaacgagc cancaggggt tcttttgggt 540
ataaatgggc aattcgnct gtcttaagnc tgatgacctc anccgtgggt tttggat 597
```

<210> 36

<211> 457

<212> DNA

<213> Homo sapiens

<400> 36

```
tagggcggaat tggagctccc cgcggtggcg gccgaggtac ctgagccagg aggaggccca 60
ggccgtggac caggagctat ttaacgaata ccagttcagc gtggaccaac ttatggaact 120
ggccgggctg agctgtgcta cagccatcgc caaggcatat cccccacgt ccatgtccag 180
gagccccct actgtcctgg tcatctgtgg ccggggaat aatggaggag atgggtctggt 240
ctgtgctcga cacctcaaac tctttggcta cgagccaacc atctattacc caaaagggcc 300
taacaagccc ctcttactg cattgggtgac ccagtgtcag aaaatggaca tcccttctc 360
tggggaaatg ccgcagagc ccatgaogat tgatgaactg ttgagctggt ggtggatgcc 420
atctttggct tcagcttcaa gggcgatggt cggaac 457
```

<210> 37

<211> 433

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(433)

<223> n = A,T,C or G

<400> 37

```
agtacttcta gaattaatta aggcggggcg ctgcantccc agntacncgg naggctgagg 60
caggagaatg gcgtgaaccc angaggcgga gcttgacgtg agctgagatc gcgccactgc 120
nctccagcct gggcaacaga gtgagactcc gtcccgctaa naaatnanaa aanaanaann 180
ccnggccnc ccnctggngn ntcccanat ccnnttttn tgaatttttt tcccccccc 240
nnntggncct gttttctact agtgatgac tggtaatata caatttgtcc agtagccagt 300
ttgtttttat tgtgttttct aaccataaga gatcattaaa ggcaaagcct gtatgacgct 360
gtacacacac aaaaaaatgg tcaccgcagg ccatactacc aatgaaatgg taggtaaaca 420
aatcttctgg tca 433
```

<210> 38

<211> 420

<212> DNA

<213> Homo sapiens

<400> 38

```
agtacttcta gaattaatta aggcggggac accacttttc aaaggacttc ttggtttcag 60
cataacctaa gacaggggaat tgggagccat catatgtcac agtggtcaga attcaagcat 120
atttaagggc attttctttg attctcaaag ttcagcattc attttgaatt gagaagccta 180
tacatttagc tgacaaagtg cttatagaat ttcttaacaa ctgaaccatt caaaaggatt 240
ttttttgttt aaaactggat ttcaatgtaa gcaaatgaag aaaaaaatat agatttcatt 300
tccatagctt cttatccctg tattgaggta ataaattgtt ttactgacaa ttttcccttt 360
ttctacacta aaacaatatg tgatatattt cccctcttga agaggcaatt cattaaactc 420
```

<210> 39

<211> 86

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(86)
<223> n = A,T,C or G

<400> 39
agtactttcta gaattaatta aaacagacaa ttcttaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaan 86

<210> 40
<211> 428
<212> DNA
<213> Homo sapiens

<400> 40
agtactttcta gaattaatta aggcgggggag ttttatctat tctttacatt ggatgcaaaa 60
tgtattactc aagaagaggc attcgggtatc gaaccataga tgaacatgat gccatcattt 120
aaggaaatcc atggaccaag gatggaatac agattgatgc tgccctatca attaatTTTg 180
gtttattaat agttttaaac aatattctct ttttgaaaat agtataaaca ggccatgcat 240
ataatgtaca gtgtattacg taaatatgta aagattcttc aaggtaacaa gggtttgggt 300
tttgaaataa acatctggat cttatagacc gttcatacaa tggtttttagc aagttcatag 360
taagacaaac aagtcctatc tttttttttt ttggctgggg tgggggcatt ggtcacatat 420
gaccagta 428

<210> 41
<211> 246
<212> DNA
<213> Homo sapiens

<400> 41
agtactttcta gaattaatta aggcggggtcc ctgcttggtcc tatgaactgc tcagagctcc 60
tgtcagtccta gctgggcctt ctgggttctg gcaccatttc gtagccattc tctttgtatt 120
ttaaaggac gttatgaaag ggcttagacc aaaataaatc ataatgttac ttgagccacc 180
ttatatagct gcttgagag tctatgtagt tctttctgca tgcattaaaa atgttttagaa 240
atgctt 246

<210> 42
<211> 153
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(153)
<223> n = A,T,C or G

<400> 42
agtactttcta gaattaatta aggcgggggtc tagctcctta tttatctaaa taaagtTTTta 60
ctggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaant taaaaaaaaa aaaaaaaaaa aaa 153

<210> 43
<211> 160
<212> DNA
<213> Homo sapiens

<400> 43
agtactttcta gaattaatta aggcgggggga aagtttagagg aactgaaagt ttgggaatag 60
gctgaccaca tattatgcca gtgaccagta tgacaggaga tggggccctg ctgccagtca 120
tctccactga ataaaaaaaa aaaaaaaaaa aaaaaaaaaa 160

<210> 44
<211> 89
<212> DNA
<213> Homo sapiens

<400> 44
agtacttcta gaattaatta aggcggtcgg ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 89

<210> 45
<211> 241
<212> DNA
<213> Homo sapiens

<400> 45
agtacttcta gaattaatta aggcgggtcc ctgcttgtcc tatgaactgc tcagagctcc 60
tgtcagtcga gctgggcctt ctgggttctg gcaccatttc gtagccattc tctttgtatt 120
ttaaaaggac gttatgaaag ggcttagacc aaaataaatc ataatgttac ttgagccacc 180
ttatatagct gcttggagag tctgtgtagt tctttctgca tgtattaaaa atgttttagaa 240
a 241

<210> 46
<211> 263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(263)
<223> n = A,T,C or G

<400> 46
gccctgggaa acgattgtga acgcntgaat gaattgatga ctaanatccg ctgcgggggt 60
cctacacgcg anattgtaat gcccgttctg actggctggg aacggcacct tagcaagata 120
cttaaaaggc gccttctgtg tgccaentgc actccaccct gggcaacaga gcaaanaccc 180
catctcaaaa ataaataaat atatataaaa aataaaaaagc tattttctagt ttnatttcac 240
tataaagttt tgcttttatt aaa 263

<210> 47
<211> 277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 47
agtacttcta gaattaatta aggcggggcg atcatgaggt caggagtctg agaccagcct 60
ggccaacatg gtgaaactcc gtgtctacta aaaatacaaa aattggctgg gccgtggtgg 120
ttcgcacctg tagtcccagc tactgggggg gctgaggcag gagaatggct tgaacccggg 180
agggtagagg ttgcagtgag ccaagattgt gccactgcac tccagcctgg gcgactgagc 240
aagactgtct aaaaaaaaaa aaaaataaat aaagnaa 277

<210> 48
<211> 393
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 48
gccgtcgttt tacaccccg n aanaancnat ancnatgatn gntgccngtc ccnctcn nna 60
nagnaataat aaaantaatt aangcgggtg attaaatttc agtccattat gatttttcctt 120
tctcacataa ttactttttt ctttttagac ttataagcta gcaattacag atttaactac 180
agctatcagc atggacaaaa atagttatac agcattttat aacagagcat tatgttacac 240
caagataagg gaacttcaaa tggcattaac agattatgga attgtgctgc ttcttgatgc 300
tacagaaact gtnaaactaa ataccttcct taatcgtgga ctcactctacg tagaactagg 360
ccagtatggc tttgcactag aggattttta aac 393

<210> 49
<211> 228
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(228)
<223> n = A,T,C or G

<400> 49
ctnctgangnt acttntctaga aattaattaa gggcggggnt agancaaaaa aaaataaaac 60
aacaacaaaa aaaaacnaaa aatanaaaaa aaaaaanaaa nnnannnaan nnaaaantaa 120
aaattnnnta tttattttta antaaaaant atactnaact aattatttna attaaagaaa 180
aaataantaa aaaaattnat aaanaataaa tnttaaataa aaaatatt 228

<210> 50
<211> 158
<212> DNA
<213> Homo sapiens

<400> 50
agtacttcta gaattaatta aggcggggag aggaggctct caataaataa tcgtgtaacc 60
ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 158

<210> 51
<211> 112
<212> DNA
<213> Homo sapiens

<400> 51
agtacttcta gaattaatta aggcggggcaa taaaagttgt catggtgtgt aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 112

<210> 52
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 52
tgggtgccgg gccccccctc gagagtactt ctagaattaa ttaaggcggg agaaaaggaa 60
aagacattcc agacaaaaag actaacttgt cagaaagccc tgtggcggaa gggagctttt 120

```
ccaatatgaa gaactgagcc tggagagatg ggatgagggg gagtgtcgaa ccttttaggc 180
tttgtaaagg agttttggtt ttctcctaata agcaatggga tatcttccaa ggaatctcaa 240
tcaaaagggg gagatggctc cgattggaat gtcattccctg gctgaagagt agaggaagca 300
aaaaaaaaa aaaaaaaaaa annngnnnnnn cccnntnttt tttttt 345
```

<210> 53
<211> 549
<212> DNA
<213> Homo sapiens

```
<400> 53
cccttagcgt ggtcgcggcc gaggtacttg gtggaccacc atcacaccct cctgtgcaat 60
gggtattggc ttgcctggct gattcatgtg ggagagtcct tgtatgccat agtattgtgc 120
aagcataaag gcatcacaag tggtcgggct cagctactct ggctcctaca gactttcttc 180
tttgggatat cgtctctcac catcttgatt gcttacaac ggaagcgcca aaaacaaact 240
tgaagttgtc tgaaagcttg ctctacactt ttacattcat cctcaccctt ttttttgttg 300
ggtagaggag gtgcagtaat ttactcagtg atctttctac tttctagaaa ctgtccttca 360
aagctcttta agacccctc gttagtcagt tttttctctt atatgctctg gttgagcttg 420
aatagaccag ttgttactta agaaagaaac agagaaagat tttagctttt caatcctatt 480
tggcagagga cttcagctac cttcttacag tctttggctg tgttggtacc tgcccgggcg 540
gccgctcga 549
```

<210> 54
<211> 528
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(528)
<223> n = A,T,C or G

```
<400> 54
gatatctgca gaattcgccc ttagcgtggt cgcggccgag gtacataaag cagattcaag 60
ggttaaaata aaaacagaat tttggagtgt ggtcaaataa ggtgcacaga ttccagaacc 120
ctcagagggc ctgctggccc tctccagaca ttctgtgtcc gtggtgcagg agctggggcc 180
gtccctaaca gctccgact ggcttantgc agtgggtgctc acagtttcag gaactactag 240
gtgaagtgtc tggctcaagt ctgccaaagt tcttcaactc atcgtcagaa gtggagcact 300
atccctaggt tcgattccca tgaaatattt tatgatttcc atcctctntg cccgctcttc 360
caaataaggc cctgtgatgc caacgaaggg ggcatgggtg aggggtctaag gctctcatta 420
anggcctaata tctgtgtggg atatcaacac atgacagaca cttgactgca acattcaaga 480
catttaaggc agtgggttca tttaatgact acttttccaa aataaata 528
```

<210> 55
<211> 731
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

```
<400> 55
cccttagcgt ggtcgcggcc gaggtacctc attagtaatt gttttgttgt ttcatttttt 60
tctaatgtct cccctctacc agctcacctg agataacaga atgaaaatgg aaggacggcc 120
agatttctcc tttgctctct gtcattctc tctgaagtct aggttaccac ttttggggac 180
ccattatagg caataaacac agttcccaaa gcatttggac agtttcttgt tgtgttttag 240
aatggnnttc ctttttctta gccttttctt gcaaaaggct cactcagtc cttgcttgct 300
caatggactg ggctcccagg gcctangctg ccttcttttc catgtccac ccatgagccc 360
tccactggac agcttantaa gcctggccct tcattctggc gctgtgttct ttctctggga 420
```



```
aaatcaatac ctcttacctt ctnttgcatt caaagatctt aaaggattgt caaacctttca 480
aaacgttaca agnagaaccn nccannaagg tcctataaaa tgccagtaag tgacccttnt 540
caagctgtca aggcttttaa attaggantt tggggattta aatgctttgt ntttttttaa 600
agggaanaaa ataagagttg ctnnntttta aaaaatgcaa tgttttttta nccaattaaa 660
aatttnnccc caaacctttt ttaaaaagna aanaaaaaana ccncttttgg gagancggna 720
aaaaaaaaa a 731
```

<210> 56
<211> 514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(514)
<223> n = A,T,C or G

```
<400> 56
cccttagcgt ggtcgcggcc gaggtacaag atgtgcatgc agtccaaggc catgaacgag 60
gcatcccacg gccagctggg catgctgggtg ttcaggcacg agatagaggc tcaccttcgc 120
aaacagaagc agaagacaag tagcaaaaaa acatgaactc ccagagaagg attgtgggag 180
acactttttc tttccttttg caattactga aagtggctgc aacagagaaa agacttccat 240
aaaggacgac aaaagaattg gactgatggg tcagagatga gaaagcctcc gatttctctc 300
tgttggtgct tttacaacag aaatcaaaat ctccgctttg cctgcaaaag taaccagatt 360
gcaccctgtg aagtgtctga caaaggcaga atgcttgtga gattataagc ctaatggtgt 420
ggagggtttg atggtgttta caatacactn agacctgatg gttttgtggn gtcattgaa 480
aatattcatg aatttaaaga gcagtttttg gtna 514
```

<210> 57
<211> 409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(409)
<223> n = A,T,C or G

```
<400> 57
cccttagcgt ggtcgcggcc gaggtactct ttctctcccc tcctctgaat ttaattcttt 60
caacttgcaa tttgcaagga ttacacattt cactgtgatg tatatttgtt tgcaaaaaaa 120
aaaaagtgtc tttgttttaa attacttggt ttgtgaatcc atcttgcttt ttccccattg 180
gaactagtca ttaaccctac tctgaactgg tagaaaaaca tctgaagagc tagtctatca 240
gcatctgaca gatgaaattg gatggttctc agaaccattt caccagaca gcctgtttct 300
atcctgttta ataaattaat ttttgggggt cctctaccat gccatagcaa aacccctgc 360
ttccaaattc ttgtcaacaa ttaaaaagtc tgntggacct tggaagttt 409
```

<210> 58
<211> 553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(553)
<223> n = A,T,C or G

```
<400> 58
ttttccnttt tttttttttt tttttttttt tccccnccaa gctttatcta gncttagact 60
ttttaaaaaa gtttgggggc agattctgaa ttggctaataa gacatgcatt tttaaaacta 120
gcaactctta tttctttcct ttaaaaatac atagcattaa atcccaaata ctatttaaag 180
```

```
acctgacagc ttgagaaggt cactactgca tttataggac cttctggtgg ttctgctgtt 240
acgtttgaag tctgacaatc cttgagaatc tttgcatgca gaggaggnaa gaggtattgg 300
attttcacag aggaagaaca cagcgcagaa tgaagggcca ggcttactga gctgnccagt 360
ggagggctca tggnggggac atggaaaaga aggcagccta ggccctgggg agcccagtc 420
actgagcaag caagggactg agtgagcctt ttgcaggaaa gggctaanaa aaaggnaaac 480
cattctaaaa cacancaaga aactggccaa atgctttggg aactgggggtt attggccnat 540
aatggggccc caa 553
```

<210> 59

<211> 579

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(579)

<223> n = A,T,C or G

<400> 59

```
ccctttcgag cggccgcccg ggcaggtact tttttttttt tttttntttt ttttcgcct 60
ccccaaagct ttatttntnt tganttttta aaaaagtttg ggggcanatt ctgaattggc 120
taaaanacat gcattttttaa aactagcaac tnttatttnt ttccttttaa aatacatagc 180
attaaatccc aaatcctatt taaagacctg acagnttgan aaggtcacta ctgcatttat 240
aggaccttct gngggttctg ctgttacgtt tgaagtctga caatccttga naatntttgc 300
atgcanagga ggtaanaggt attggatttt cacagaggaa gaacacagcg canaatgaag 360
ggccaggctt actgagctgt ccagtggagg gctcatgggt gggacatgga aaanaaggca 420
gcctaggccc tggggagccc agtccactga gcaagcaagg gactgantga gccttttgca 480
ggaaanggct aanaaaaagg aaaaccattc taaaacccaa cangaaactg tccaaatgct 540
ttgggaactg ggtttattgc ctataaaggg tccccaaaa 579
```

<210> 60

<211> 71

<212> DNA

<213> Homo sapiens

<400> 60

```
ctcgagccgg ctcgccagtg tgatgggata tctgcagaat tcgcccttag ccgtggtcgc 60
ggcccgatgt a 71
```

<210> 61

<211> 552

<212> DNA

<213> Homo sapiens

<400> 61

```
cccttagcgt ggtcgcggcc gaggtaccta gaaaacagaa acttgagtag acatggtaat 60
gaccagaaaa ggctatcttt atacatttct tttgctacgc ttcaaattca tgtcacctaa 120
aagttgtgaa gtgcacaaaa caaatctact taactgaaaa ttattttcaa tgaatgggat 180
gtttagaact ctgtgagggg ttttaagggt ttttcgaata gcaaattcta atgaggcttt 240
tttaagttgg caatttaaac tcatacaaga aataaaaaact caccagtgtg gctgggcaga 300
atataatata tttctcaaat attgtttgtt tgttttttcc ctgcactgta tccatggtcc 360
catgatgaaa ctgttatatt gctgatatat ttattggaat atgtgggcca acttcccttt 420
cactcaacat atggattggg agtttaaaat aattcctttc tattaagcaa atgtgtggct 480
aaggcacatt taaatagccc attaaaccaa tggagatgac aatgtgttac cctcagagaa 540
agcttaattt tt 552
```

<210> 62

<211> 463

<212> DNA

<213> Homo sapiens

<400> 62
cccttttcgag cggccgcccg ggcaggtact atatggacac cagcatggag cagaaaatga 60
gggcagcagt gtccaatctc attccagggtg agaagttgca cagtgtccaa taggtgcata 120
catctcctta gtaagtagtt gtgattaaca atgaaataga aatgaaaaat atattttttt 180
atztatgtgt attatatattt tcaggcagct aataagttgg taggacataa tattttaattc 240
gttggggacc taattatttta taaattgaat ggtagatat ttctttttggc ctaagccacc 300
atgaaaaaat cactgaggcg ctaagggaaa catgaactaa gaagcccttc tgagtctctg 360
ttttctcaac tgtaagatga agaaacctgc tccaccttcc tcttgcgatt gtcgaacggc 420
agttgagata ctgcgccaga atggaccctt attgatggcc tac 463

<210> 63

<211> 663

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(663)

<223> n = A,T,C or G

<400> 63
cccttttcgag cggccgcccg ggcaggtacc tcattagtaa ttgttttggt gtttcatttt 60
tttctaattgt ctccccctcta ccagctcacc tgagataaca gaatgaaaat ggaaggacag 120
ccagatttct cctttgctct ctgtctcattc tctctgaagt ctaggttacc cattttgggg 180
acccattata ggcaataaac acagttccca aagcatttgg acagtttctt gttgtgtttt 240
agaatggttt tcctttttct tagccttttc ctgcaaaaagg ctcaactcagt cccttgcttg 300
ctcaagtgga ctgggctccc cagggcctag gctgccttct tttccatgct caccatgag 360
ccctccactg gacaagctca gtaagcctgg cccttcattc tgcgctgngt tcttctctgt 420
gaaaatccaa tacctcttac cttctctgca tgcaaaagatt ctcaaggatt gcagacttca 480
aacgtaacag cagaaccacc agaaggctct ataaatgcag tagtgacctt ttcaagctgt 540
caggccttta aatangaatt tgggaattta atgctatgta tttttnaaag gaaagaaata 600
agaagttgct tagntttnaa aatgcatgct ttttanccca attaaaaatt tgcccccaaa 660
ctt 663

<210> 64

<211> 269

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(269)

<223> n = A,T,C or G

<400> 64
ngatatctgc anaattcgcc ctttcgagcg gccgcccggg caggtacaac tttttaaata 60
gggaatatga tagcttngca tgggtggtgt cacctatagc cccactgcc tggaaagctg 120
gggtgggaga atcgcttgag tccaggagtt tgaggttaca gtgatccacg atcnngccac 180
tacactccag cctgggcanc agagcaagac cctgtntcaa agcataaaat ggaatnacat 240
atcaaatgaa acanggaaaa tgaagctga 269

<210> 65

<211> 194

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(194)

<223> n = A,T,C or G

<400> 65
cccttttcgag cggccgcccc ggcaggtacc tttttttttt tttttttttt tccgtctccc 60
caaagcttta tctgtcttga ctttttaaaa aagttnnggg gcanattntg aattggntaa 120
aagacatgca tttttaaaac tagcaactct tatttctttc ctttaaaaat acatagcatt 180
aaatcccaaa tcct 194

<210> 66
<211> 69
<212> DNA
<213> Homo sapiens

<400> 66
gcatgctcga gccggccgcc agtgtgatgg gatattctga gaattcgccc tttcgagcgg 60
cccgcccg 69

<210> 67
<211> 509
<212> DNA
<213> Homo sapiens

<400> 67
cccttttcgag cggccgcccc ggcaggtaca agctatcttt tgctccaaaa cagttctgaa 60
ggttttattt atattttatc ttatcccagag ggaccaacag caggcatacc tttgccaggc 120
cttcttgcag aaagacacag agccgtaaag gcaaaaaataa aattgcaata aagtatatgg 180
tattgggggc agggagaacc agaaaccctc aaagagaacc aatttgtagc acgttctttt 240
ttaaggctct acccctgtag aagtaagaaa cttagcctgcc tttttagcca tatgagagtt 300
tcctccagag ccatcttcca aagtagcaga cttggccaag ttgcccaatg ccaataaagt 360
gagttggaag ttcgtttgct tcaaacacac tgcacttaga aaccagactt gaaataatcg 420
aagccccaca gaaaagcttc atgaaacgaa gtgttacttt cctagagaat aagaaagtca 480
caagattgag gagtctgttc taaagttct 509

<210> 68
<211> 716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(716)
<223> n = A,T,C or G

<400> 68
cccttttcgag cggccgcccc ggcaggtacc tcattagtaa ttgttttggt gtttcatttt 60
tttctaattgt ctcccctcta ccagctcacc tgagataaca gaatgaaaat ggaagyacag 120
ccagattttct cctttgctct ctgatcatc tctctgaagt ctaggttacc cattttgggg 180
accattata ggcaataaac acagttccca aagcatttgg acagtttctt gttgtgtttt 240
agaatggttt tcctttttct tagccttttc ctgcaaaaagg ctactcagt cccttgcttg 300
ctcagtggac tgggctcccc agggcctagg ctgccttctt ttccatgtcc acccatgagc 360
cctccactgg acaagctcag taagcctggc ccttcattct gcgctgtgtt cttcctctgt 420
gaaaatccaa tacctcttac ctctcttgca tgcaaaagatt ctcaaggact ggcagacttc 480
aaacgtaaca gcagaaccac cagaaaggcc tataaatgca gtagtgacct tctcaagctg 540
cangtcttta aataggattt gggaattaat gctatgtant tttaaangga aagaaataag 600
aagttgctag ttttaaaaat gcatgttttt aagccaattc aaaaattggc cccaactttt 660
tttaaaaagt caagacaaga taaagcnttt ggggagaacg gaaaaaaaaa aaaaaa 716

<210> 69
<211> 477
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(477)
<223> n = A,T,C or G

<400> 69
cccttagcgt ggtcgcggcc gaggtactca tgtatttttt ttttccagat ctctttcccc 60
aagttgctat tgtaagagta ttctgctgcg tgtggatgca gttatacaca ttaaagcaga 120
tctggagtct gaagtagcta taaagcagct ataaaacaga aatacatgca tagctgcaga 180
aaccatgata ggtagaggac ttttcttttg gttttgtttt gttttgtttt 240
tggtttttaca gagaagagat ttttattcaa agaaaaaaat tccagtgaat tgtgcacaaa 300
tgctggtttt tacaccatcc taaagaaaaa ctttacaagg ggtgttttgg agtanaaaaa 360
aggttataaa gttggaatct taaattgtna aattaacat tgagtgtcaa ggntctaaaa 420
gcagaactta ttttgtgcaa tgaacataa gaaagactac tgtatagggt tttttt 477

<210> 70
<211> 380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 70
ccctttcgag cggccgcccc ggcaggtact cagacaaata caacgtgccc atttcgtcag 60
atattgcgca gaaccaagaa ttttataaga acgcagaagt tagaccacca tttaccgtat 120
gcatntttta ttaaggcagg ccattctcga atctccagaa aagcagctaa cactaaatga 180
gatctataac tggttcacac gaatgtttgc ttacttccga cgcaacgcgg ccacgtggaa 240
gaatgcagtg cgtcataatc ttagtcttca caagtgtttt gtggcgagta gaaaacgtta 300
aagggggcag tatgggacag tggattgaag tangaattcc aaaaacgaag ggcccaaaaa 360
ggatcagtgg gtaacccttt 380

<210> 71
<211> 377
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G

<400> 71
ntnttagcgt ggtcgcggcc gaggtacttt ttgcttttanc agatagatag ggcattccaat 60
acaactgaaa caacctgata acaaattaat tttatttttc aataaaaaagg aatgctctgg 120
ttttttaact ggctccttga ggaagccaga agatggcatc tgctctttta acaggcttct 180
cttatctgat ttgagacaca aatccaccaa gnattctttc ttacagtgga agtaggcacc 240
accctcaga tcacgaggcc cctaggnaag aagcctgtgg gaaatcagcc ctgtgatgtt 300
gtgggtgggt gggccagcac ctagaagaca catggtnngt tgtgcaacat aaaatcccct 360
tcaagcggac tcagtgg 377

<210> 72
<211> 379
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(379)
<223> n = A,T,C or G

<400> 72
cccttagcgt ggtcgcggcc gaggtactct ggatcatctt gttcgtttgg tcgtgcaagg 60
tgttaactat ttctacttcc catatcacia agttagtcca caggaggagc tggaggatct 120
tgtccattat gaggactggg tggctttcca ggtaggctgg atcctcttag attaggaggg 180
tctcagtaaa gaacaagatc aatgcaanta accatccagg ctaccaagat cattgttaac 240
actgatgcc aatcaccag agggccccgg taaattcctt gaagacactc tgtgtctgtt 300
gcangtanga ctgggactnc cgtaacagat tgatcaagnt cttctcantt gcatgttcat 360
ggagagcaaa cacattcac 379

<210> 73
<211> 403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

<400> 73
cccttagcgt ggtcgcggcc gaggtcggcc gaggtacttt attttcaaaa cactcatatg 60
ttgcaaaaaa cacatagaaa aataaagttt ggtggagggt ctgactaaac ttcaagtcac 120
agacttttat gtgacagatt ggagcagggg ttgttatgca tgtagagaac ccaaactaat 180
ttattaaaca ggattagaaa caggctgtct ggggtgaaatg gttctgagaa ccatccaatt 240
cacctgtcag atgctgatag actagctctt tcagatgttt ttttctacca gttcagaaga 300
tngggtttaa atngacctag ttccaatggg ggaaaaaagc aagaatggga tttcacaaaa 360
cccaaggtna tttttaaac aaagacccc tttttttttg gca 403

<210> 74
<211> 378
<212> DNA
<213> Homo sapiens

<400> 74
cccttagcgt ggtcgcggcc gaggtacat gctgacttct tgggtatctt taaggcctaa 60
ttttcccttc cttgagatta ctgtagtgtg ttccagctaa tttctatttg gaaacgagtt 120
ggaacagctg aaactgggt attattgaag gcaaagcagc ctcacgtcag ttttttatca 180
gctcatttgg gaagtttttt tttttttttt ttttaattaat tagaaagtag gctgggcacg 240
gtggctcatg cctataatcc cagcacttgg ggaggccgag gatctcctct ctgggtggatc 300
acttgagggc aggagtttaag agaccatcct ggccaacatg atgaaaccct gtctctacta 360
aaaatacaaa aagtagct 378

<210> 75
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 75
cccttagcgt ggtcgcggcc gaggtacaga atttattatg aaatagctta atggcaagtg 60
gtaatttaga agaattaagt tatcagatag gagatatatt aaaatattta aaaattggat 120
atattcttga agccctttta cacaagtaat ttctataatt tgattgtaat gaaagtataa 180
tataccttgt tactattatc aggattaatt tttgaaagta gaattcctta atcaagccaa 240
ggtaaatgct gcttttatagg aaattaatca ggtagtttaa cactagagct cattagccca 300
acctgtatgt agcacaaaaa taaatcattc tctgataaat nccntattaa aatantattt 360
tttaattcat acctttttta aataa 385

<210> 76
<211> 691
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(691)
<223> n = A,T,C or G

<400> 76
cccttagcgt ggtcgcggcc gaggtacttt tttttttttt tttttttttt ccgtctcccc 60
aaagctttat ctgtcttgac tttttaaaaa agtttggggg cagattctga attggctaaa 120
agacatgcat ttttaaaact agcaactcct atttctttcc tttaaaaata catagcatta 180
aatcccaaat cctattttaa gacctgacag cttgagaagg tcactactgc atttatagga 240
ccttctggtg gttctgctgt tacgtttgaa gtctgacaat ccttganaat ctttgcattgc 300
agaggaggta agaggtattg gatthttcaca gaggaagaac acancgcaaa atgaagggcc 360
aggcttactg agctgtccag tggagggtct atgggtggga catggaaaag aaggcagcct 420
aggccctggg gagcccantc cactgagcaa gcaagggact gagtgagcct ttncaggaaa 480
aggctaanaa aaaggaaaac catttttaaaa cacaacaaga aacttgtcca aatgcttttg 540
gaaccngttt tattgcctat aatgggtccc ccaaatggg taacctaaac tttaaaagan 600
aatgaaccn anagcnaag gaaaaatctg gcttgccctt ccattttcat tctnttatnt 660
taaggngacc ttttttnang ggancccttt n 691

<210> 77
<211> 697
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(697)
<223> n = A,T,C or G

<400> 77
cccttagcgt ggtcgcggcc gaggtacttt tttttttttt tttttttttt gtctcccca 60
agctttatct gtcttgactt ttttaaaaaa tttgggggca gattctgaat tggctaaaag 120
acatgcattt ttaaaactag caactcttat ttctttcctt taaaaataca tagcattaaa 180
tcccaaattc tatttaaaaga cctgacagct tgagaagggt actactgcat ttataggacc 240
ttctggtggt tctgctgtta cgtttgaaat ctgacaatcc ttgagaatct ttgcatgcag 300
aggaggtaag aggtattgga ttttcacaga ggaagaacac agcgcaggat gaagggccag 360
gcttactgag ctgtccagtg gaggggtcat gggtgggaca tggaaaagaa aggcagccta 420
agccctggg agcccaatcc gctgagcaag caagggactg antgagcctt ttgcaggaaa 480
aggcttanaa aaangaaaac cattnttaaa aacaacaaga aacttttcca aatgctttng 540
gaaccggggt tattggccat aaatgggncc ccaaatggg taanccaaac tttaaaaaan 600
atganccgaa ancaaagggn aaaatctggg tggcccttcc atttnattnt ngtannncaa 660
agggaacctg gnnnaagggt ggnccctttt aaaaaaa 697

<210> 78
<211> 582
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(582)
<223> n = A,T,C or G

<400> 78
cccttagcgt ggtcgcggcc cgaggacttt tttttttttt tttttttttt ttccgcctc 60

```
cccaaagctt tatctgtctt gacttttttaa aaaagtttgg gggcagattc tgaattggct 120
aaaagacatg cttttttaaa actagcagct cttatttctt tccttttaaaa atacatagca 180
ttaaatccca aatcctatct aaagacctga cagcttgaga aggtcactac tgcattttata 240
ggaccttctg gtggctctgc tgttacgttt gaagtctgac aatccttgag aatctttgca 300
tgcagaggag gtaagaggta ttggattttc acagaggaag aacacagcgc anaatgaagg 360
gccaggctta ctgagctntc cagtggaggg ctcatgggtg ggacatggaa aanaaggcag 420
cctangccct ggggagccca ntccactgag caagcaaggg actgantgag ccttttgtag 480
gaaaaggctt aaaaaaggga aaaccattct aaaacacaac aaggaaactg tccaaatgct 540
ttgggaactg ggtttatatt cctattatgg ggtcccaaaa aa 582
```

<210> 79

<211> 580

<212> DNA

<213> Homo sapiens

<400> 79

```
cccttagcgt ggtcgcggcc gaggtactac aaaaacagaa taattttgaa gttttagaat 60
aaatgtaata tatttactat aattctaaat gtttaaatgc ttttctaaaa atgcaaaact 120
atgatgttta gttgctttat tttacctcta tgtgattatt tttcttaatt gttatttttt 180
ataatcatta tttttctgaa ccattcttct ggctcagaa gtaggactga attctactat 240
tgctaggtgt gagaaagtgg tggtgagaac cttagagcag tggagatttg ctacctgggc 300
tgtgttttga gaagtgcccc ttagaaagt aaagaatgt agaaaagata ctacgtctta 360
atcctatgca aaaaaaaaaat caagtaattg ttttcctatg aggaaaataa ccatgagctg 420
tatcatgcta cttagctttt atgtaaatat ttcttatgtc tcctctatta agagtattta 480
aaatcatatt taaatatgaa tctattcatg ctaacattat ttttcaaaac atacatggaa 540
atttaaccga attgtctcat ataagggttt atttgaattg 580
```

<210> 80

<211> 596

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(596)

<223> n = A,T,C or G

<400> 80

```
ccctttcggc ggcccgcccg ggcagggtacc tgggggtctca gggttgctct gggcctgac 60
atccactcag atctgtaagg aggatttgca ggatccattt agaaagatcc tcccttactt 120
ccacaagcat ggcctttggc tcttaaatac ctgtgctggg gttttgtaat tatagaaaca 180
acaggaacca aaactcatta atgttgagct acaaaccaga gggaagcttc tttctcaaaa 240
cagggtcag gcctagaaaa atctagtttt ctgaaatcgc tagccagcaa cagcactgag 300
atggccatcc cagaaacaag gccaacacag aagcaccat aaaggccgct ggagggtggg 360
acaaagagat ccttgctgtc cttacagacc ccctgacttc caaggagctc ccctcttacc 420
cagcctggcc tgccttctcc acagggtagc tgatcgtcag catcatcttc aatgggtgtg 480
ccaaaagcac tcaantgctc ctgccatccc tgtccatctt caacatgaaa aggagaggtt 540
agcacttcaa cctgggcgac tgagcaagan ttcattctta aaaaaaaaaa aaaatt 596
```

<210> 81

<211> 209

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(209)

<223> n = A,T,C or G

<400> 81

```
cccttagcgt ggtcgcggcc gccggggcag gtactttttt tttttttttt tttttttacc 60
```



```
ggctcccaaa agctttatct gtcttgactt tttaaaaaag tttgggggca nattctgaat 120
tggtctaaaag acatgcattt ttaaaactag caactcttat ttctttcctt taaaaatata 180
tagcattaaa tcccaaatcc tattttaaag                                     209
```

<210> 82
<211> 46
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(46)
<223> n = A,T,C or G

```
<400> 82
atctgcagaa ttcgccctta ncgtgggtcgc ggccgaggta cttttt                                     46
```

<210> 83
<211> 601
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(601)
<223> n = A,T,C or G

```
<400> 83
cccttagcgt ggtcgcggcc cgaggnacca tgatatcatg tctcctgctt ggacattntg 60
ggaaaggggg accagctggg tggccaattt atcctacagg tcttggaagg ngggacctct 120
tcaaaaagaag atctggtaag ggcaagcagc acaagtggcc atggaaaaag aaaaactcta 180
cannatattt ccgaggatca aggacaagtc caaaacgaga tctctctcatt cttctgtctc 240
ggaaaaaccc aaaacttggt tgatgcagaa tacaccaaaa accagcctgg aaatctatga 300
aagatcctta ggaaangcca gctgctaagg atgtccatct tgtggatcac tgcaaataca 360
agtatctggt taatttttga ggcgtaactg caagttttcc gggttaaacac ctcttctgtg 420
gtggctcact tggtttccat gttnggtgat gaagtggcta gaattcttct atccacagct 480
tgaagccttg ggttcactat attccaagtc aaaacagatc tcttcaatgt ccaanagctg 540
ttacaatttt gaaaaaccaa atgatgatgt aacttcaaga aaattgcttg aaagggggaa 600
g                                                                                   601
```

<210> 84
<211> 570
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(570)
<223> n = A,T,C or G

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<400> 84
cccttagcgt ggtcgcggcc gaggtaccac aaaaacagaa taattttgaa gttttagaat 60
aaatgtaata tatctactat aattctaaat gtttaaatgc ttttctaaaa atgcaaaact 120
atgatgttta gttgctttat tttacctcta tgtgattatt tttcttaatt gttatTTTTT 180
ataatcatta tttttctgaa ccattcttct ggcctcagaa gtaggactga attctactat 240
tgctaggtgt gagaaagtgg tgggtgagaac cttagagcag tggagatttg ctacctgggc 300
tgtgttttga gaagtgtccc ttagaaaagt aaaagaatgt agaaaagatc tcagtcttaa 360
tcctatgcaa aaaaaaaaaa caagtaattg ttttcctatg aggaaaataa ccatgagctg 420
tatcatgcta cttagctttt atgtaaatat ttcttatgnc tcctctatta agaagtattt 480
aaaatcatat ttaaatatga atctattcat gctaacatta ttttcaaaac atacctggaa 540
attaaccag aatggctaca tataaggggtt                                     570
```

<210> 85
<211> 724
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 85
ccctttcgag cggccgcccg ggcaggtacc tcattagtaa ttgttttggt gcttcatttt 60
tttctaattgt ctccctctta ccagctcacc tgagataaca gaatgaaaat ggaaggacag 120
ccagatttct cctttgctct ctgctcattc tctctgaagt ctaggttacc cattttgggg 180
acccattata ggcaataaac acagttccca aagcatttgg acagtttctt gttgtgtttt 240
agaatggttt tcctttttct tagctttttc ctgcaaaagg ctcaactcaag tcccttgctt 300
gctcagtggg ctgggctccc cagggcctag gctgccttct tttccatgtc ccacccatga 360
gccctccact ggacagctca gtaagcctga cccttcattc tgcgctgtgt tcttcctctg 420
tgaaaaatcca atacctctta cctcctctgc atgcaaagat tctcaaggat tgtcagactt 480
caaacngnac agcagaacca ccagaaggct ctataaatgc agtaagtga cttctcaagc 540
tgtcaggtct ttaaatagga tttgggattt aatgctatgt atttttaaaag gaaagaaata 600
agaagtgtct agttttaaaa atgcatgtct ttagccaat ttagaatctg gccccaaact 660
tttttaaaaa gtcaaagaca gataaagctt tngggagacg gaaaaaaaaa aaaaaaaaaa 720
aagt 724

<210> 86
<211> 51
<212> DNA
<213> Homo sapiens

<400> 86
cgccagtgtg atgggatatc tgcagaattc gccctttcgc ggccgcccgg g 51

<210> 87
<211> 510
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(510)
<223> n = A,T,C or G

<400> 87
ccctttcgag cggccgcccg ggcaggtaca gtcacccac tacctggcta tttcattact 60
tgggtgctcta gacaagctcc aagaactgac tggatcttgg cttgctctgt ttctgtcatt 120
gctaataataa tatggaaaac attgctgaaa agaacagaga tggccatgga tatggctagg 180
ttaggtattc atatccaaat atctgaactc taacctaatg tggatatgat tctgtagcat 240
tatattaaaa gctatgatga tgcaatgcag gaaataacct ttcattctcc cccctagagg 300
atcacgacag gtgctttcaa tgccctgcctt atctatggga caagtagtgt gattcttcaa 360
gtgagaagtg aaagcctttg ggggatttga gtcangaagg ggaacatggc taaattgcct 420
ggaaactctg ccaacaagtc tgcgggtaga ttctacttgt ctctgggata aaaaaatctg 480
tgctcaatga aacttattgt gtttgaaaaa 510

<210> 88
<211> 59
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(59)
<223> n = A,T,C or G

<400> 88
tgctcgagcc ggcccgccag tgcganggat atcngcaciaa ttcccccttt caagcggcc 59

<210> 89
<211> 255
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 89
ccgcggtggc ggccgaggta ccacaagata ttatgcatgc tccaatcgag caaaatgtcc 60
atcataacaa atataaaatg tttccagaaa gtatcatagc gtggtttccc atctcctgta 120
tggtcttaggc tccaaggtct gtgagttaat gctgttatta catcccgatc tgtttgctctc 180
atcttgtaga taactttctgg caagaaagaa cagaccacac tattattata cagttgagga 240
agctctagaa ctagn 255

<210> 90
<211> 683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(683)
<223> n = A,T,C or G

<400> 90
ccgcggtggc ggccgaggta cctcattagt aattgttttg ttgtttcatt tttttctaata 60
gtctcccctc taccagctca cctgagataa cagaatgaaa atggaaggac agccagattt 120
ctcctttgct ctctgctcat tctctctgaa gtctagggtta cccatttttg ggaccatta 180
taggcaataa acacagttcc caaagcattt ggacagtttc ttgttggtgt ttagaatggt 240
tttccttttt cttagccttt tcttgcaaaa ggctcactca gtcccttgct tgctcaagt 300
gactgggctc ccagggcct aggctgcctt cttttccatg tcccacccat gagccctcca 360
ctggacagct cagtaagcct ggcccttcac tctgcgtgtg gttcttcctc tgtgaaaatc 420
caatacctct tacntcctct gcatgcaaaag attctcaagg attgtcagac ttcaaaacgt 480
nacagcagaa ccaccagaaa ggtcctataa aatgcagnta gtggaccttc ttcaagctgt 540
caggtctttt taaataggat ttgggggata taatggctat tgtattttta aaaagggaaa 600
gnaaatnaag agtttgctag attcttaaaa aangccatgg tctttttanc caatttnaaa 660
aatnttgccc cccaactttt ttt 683

<210> 91
<211> 74
<212> DNA
<213> Homo sapiens

<400> 91
tcgagcggcc cgcccgggca ggtacttttt tttttttttt tttgggattt tttaggtagt 60
gggtgttgag cttg 74

<210> 92
<211> 520
<212> DNA
<213> Homo sapiens

<400> 92
cgagggtacgt tcttctttcc cagttttctct acccttagct tctcctcacc ctcatTTTTgc 60
cctgctggct gctcaaacta tgcaacagat tgcgcatcct cgcttaccCa tggccagtt 120
tggaggaacc ttctcacctt ctcttaacac atggggacca ttcccagtgA gacctgtgaa 180
tcctggcaac acaaatagct ctccaaagca taataacaca agccgtctac ctaaccagaa 240
cgggactgtt ttaccctcag agtctgctgg actagctact gccagttgtc ctatcactgt 300
ctcttctgta gttgctgcca gtcagcaact gtgtgtcact aatacccgga ctcttcatc 360
agtcagaaaag cagttgtttg cctgtgtgcc taagacaagt cctccagcaa cagtgatttc 420
ttctgtgaca agcacttgta gttccctgcc ttctgtctcc tctgcacctA tcaactagcgg 480
gcaagctccc accacatttc tacctgcaag tacctgcccG 520

<210> 93
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(382)
<223> n = A,T,C or G

<400> 93
ccgcggtggc ggccgcccgg gcagggtaccg atacagaaga agctgcgttt tgaagacacc 60
ctggagtttg tagggtttga tgcgaagatg gctgaggaat cctcctctc ctctctctca 120
tcttcaccaa ctgctgcaac atctcagcag cagcaactta aaaataagag tatattaatc 180
tcttctgtgg cttcggtgca tcatgcaaac ggctagcca aatcttctac caccgtctct 240
agctttgcta acagcaaacc tggctctgct aagaagttag tgatcaagaa ctttaaagat 300
aagcctaaat taccagaaaa ctacacagat gaaacctggc aaaaactgaa agaagcagtg 360
gaagctattc anaatagtag ct 382

<210> 94
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = A,T,C or G

<400> 94
ccgcggtggc ggccgaggtc tatatggacc acnaacatgg gagcagaaaa atgagggcag 60
cagtggtcaa tctcattcca ggtgagaagt tgcacagtgt ccaataggtg catacatctc 120
cttagtaagt agttgtgatt aacaatgaaa tagaaatgaa aaatatattt ttttatttat 180
gtgtattata tttttcaagc agctaataag ttggtaggac ataatattta attcgttggg 240
gacctaatta tttataaatt gaatggttag atatttcttt tggcctaagc caccatgaaa 300
aaatcactga ggcgctaagg gaaacattga actaagaagc ccttctgagt ctctgttttc 360
tcaactgtaa gatgaagaaa cctgctccac ctctct 396

<210> 95
<211> 379
<212> DNA
<213> Homo sapiens

<400> 95
cgcccgggc aggtacctta gtgaggctca aaaggattct tttgggtcta ttttacgcct 60
tatctttgaa attcaccact cgggtgagaa aggtgacatt gtagtctttc tggcctgtga 120
acaagatatt gagaaagtct gtgaaactgt ctatcaagga tctaacctaa acccagatct 180
tggagaactg gtggttgttc ctttgtatcc aaaagagaaa tggtcattgt tcaagccact 240
cgatgaaaca gaaaaaagat gccaaagtta tcaaagaaga gtggtgttaa ctactagctc 300

ttgagagttt ttgatctgga gcaactcagt cagatttggt atcgatgtgg gtgtggaaaa 360
gaaaaaagggt gtcctcggc 379

<210> 96
<211> 779
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 96
cgagggtacct gtatgaggtc tcccagcccg aaggactagg ccaagccctc tgtgtgccat 60
ctccaatgag aaggaatcct gccctcacct cacccttttc caacttgccc aggggaagtgg 120
aggttccctc tttcctttcc tcttgaggc catccatgac tttagagaac agacacaagt 180
gtatccagct gtccacgggt ggagctaccc gttgggctta tgagtgacct ggagtgacag 240
ctgagtcacc ctgggtaagt tctcagagt gtcaggatgg cttgacctgc agaagatacc 300
caagggtccaa aagcacgaag gtctgcggaa agttctgggt gtcggctggc accacggtta 360
cacctataat cgagcacttt gggaggccaa gacaggagga tcgcttgaga ccaagagttt 420
gagcctgcgg tgaagctgtg aatgcaccac ggcaactcaag cctggcaatg tagcaagatc 480
ctgtctctac aagaaaattt tttaaaaatg agccaagtgt ggggggtgcat gcctgtagtt 540
tccagctact tnaggacact tacntangan ggttggtttg aaactgaaaa gttggaggct 600
tgcaatnanc cttgaatgcc ccantggcct tcaacctggg gcgaaaaana ccaagacccc 660
atnttaaaaa aaaaaaaant tntngggtnn nnattgaatt gggaaaaaaa aaaagcttgg 720
agctttttgc ctttnggcn agngancat tgnaatttgg gattttngaa nggaatggg 779

<210> 97
<211> 535
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(535)
<223> n = A,T,C or G

<400> 97
cccttagcgt ggtcgcggcc gaggtaccgc ttgctgctgc catgtgtgtg cttaaaacag 60
ggttcctttt ttagcatca gaatttgaa accattactt atatcaaatt gcacatcttg 120
gagatgatga tgaagaacct gagttttcat cagccatgcc tctggaagaa ggagacacat 180
tcttttttca gccaaagacca cttaaaaacc ttgtgctggt tgatgagttg gacagcctct 240
ctcccattct gttttgccag atagctgac tgggccaatga agatactcca cagttgtatg 300
tggcctgtgg taggggaccc cgatcatctc tgagagtcct aagacatgga cttgaggtgt 360
cagaaatggc tgtttctgag ctacctggta accccaacgc tgtctggaca gtgcgtcgac 420
acattgaaga tgagtttgat gcctacatca ttgtgtcttt cgtgaatgcc accctagtgt 480
tggccattgg agaaactgta gaagaagtga ctgactctng gttcctgggg accac 535

<210> 98
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 98
aggctactctc gtttcagctg ggctcttatg gccaacccgct cggcttgccg ccgccggggt 60

```
tccggantat atgttgattt cggctgggtc gaggggtctca ggcagagtgc gcaggctcga 120
cggcttatac tttgggaacg acatcttggc gaaccagggc gcaattgcgc ctgcgcgatt 180
ctgaggccct ttgtctatgc tgaccttcag ctccccccgc gtacctgccc g          231
```

<210> 99

<211> 229

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(229)

<223> n = A,T,C or G

<400> 99

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ccgcggtggc ggccgcccgg ncaggtagcg ggggctgggc gcggggaact gaaagccgga 60
aggggcaaga cgggctcagt tcgtcatggg gctgttttga aagaccagg agaagccgcc 120
caaagaactg gtcaatgagt ggtcattgaa ggtaagaaaa ggaaatgaga gttgttgaca 180
ggcaaataag ggatatccan gaaaaaaaaa aaaaaaaaaa nagtacctt          229
```

<210> 100

<211> 513

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(513)

<223> n = A,T,C or G

<400> 100

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cgaattggag ctccacccgc ggtggcgggc cgcccgggca ggtacttttt gcttttagcag 60
atagataggg catccaatac aactgaaaca acctgataac aaattaattt tatttttcaa 120
taaaaaggaa tgctctggtt ttttaactgg ctccctgagg aagccagaag atggcatctg 180
ctcttttaac aggtcttctt tatctgattt gagacacaaa tccaccaaga ttctttctta 240
cagtgggaag aggcaccacc cctcagatca cgaggccccct aggaagaagc ctgtggaaat 300
cagcctgtga tgtgtggttg tgggccagca cctagaanac acatggtggt tgtgcacata 360
aatcccttca gcggactcag tggaaggatg agaattctga aagtccatgc acattttatt 420
gagtaggtaa tataaaaatg ctttttcttt ttcatttggtt acaagtgcac gctttgantt 480
cccaccatnt tcagaagtca aaattacaaa agg          513
```

<210> 101

<211> 658

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(658)

<223> n = A,T,C or G

<400> 101

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agttcaggct ggatacatgt gctcacctgc tgctcttgtc ttccctaagag acagagagtg 120
gggcagatgg aggagaagaa agtgaggaat gagtagcata gcattctgcc aaaaggggccc 180
cagattctta atttagcaaaa ctaagaagcc caattaaaaa gcattgtggc taaagtctaa 240
cgctcctctc ttggtcagat aacaaaagcc ctccctgttg gatcttttga aataaaacgt 300
gcaagttatc caggctcgta acctgcatgc tgccaccttg aatcccaagg agtatctgca 360
cctgnaatan ctctccacc cctctctgct ccttactttc tgtgcaanat nacttccttg 420
gttaacttcc ttctttccat ccaccaccc actgaaatct ctttccaaac atttttccat 480
tttcccacaa atngnctttg attaacntnc ctctctccat gcctncaaan ctccaaattt 540
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ttggggaaag ctgtaccttc ancnctcta aaactaatgn atccccccgn ctncagaat 600
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